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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/643,288

08/22/2000

Deepak V. Ayyagari

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05/10/2004

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EXAMINER

HSU, ALPUS

ART UNIT

PAPER NUMBER

2665

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/643,288

Applicant(s)

AYYAGARI ET AL.

Examiner

Alpus H. Hsu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

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1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, all means in apparatus claims 4, 6, 7, 8, 12 and 13 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

2. Claims 1-3, 6, 7, 9-11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 6 of U.S. Patent No. 6,278,701.

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasoning:

Referring to claims 1-3, by interpreting the maximum received power level in U.S. Patent No. 6,278,701 as the claimed received power of the first signal and the minimum received power level in U.S. Patent No. 6,278,701 as the claimed received power of the second signal, it would have been obvious to one of ordinary skill artisan to make the same invention as claimed in claims 1-3 of the instant application.

Referring to claims 6 and 7, by interpreting the maximum received power level in U.S. Patent No. 6,278,701 as the claimed maximum received power and the minimum received power level in U.S. Patent No. 6,278,701 as the claimed minimum received power, and further changing the method claim into apparatus claim by providing all means for carrying out the claimed functions, it would have been obvious to one of ordinary skill artisan to make the same invention as claimed in claims 6 and 7 of the instant application.

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Referring to claims 9-11, by further implementing the scaling step in U.S. Patent No. 6,278,701 to include the sub-step of multiplying transmit power which produced the minimum received power level by the lowest power ratio to produce a new power level, it would have been obvious to one of ordinary skill artisan to make the same invention as claimed in the instant application.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 5 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the

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claim(s) in independent form. Claim 5 is directed to a method claim which fails to further limit the subject matter of claim 4 it depends upon, which is directed to an apparatus claim.

5. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

All claims are rejected as being vague and indefinite for lacking antecedent basis in numerous places, namely:

In claim 1, line 1, "the level of interference", lines 3 and 4, "the received power", line 5, "the power ratio", line 6, "the lowest power ratio", line 7, "the transmit power";

In claim 3, line 2, "the minimum received signal", line 3, "the signal to noise ratio requirement";

In claim 4, line 1, "the level of interference", line 4, "the path gain", lines 5 and 7, "the received signal strength", line 11, "the lowest power ratio", line 12, "the transmit power";

In claim 6, line 4, "the maximum received power capability", line 6, "the minimum received power", line 7, "the communications quality requirements", line 8, "the ratio", line 10, "the lowest user power ratio", lines 11-12, "the minimum power", line 12, "the user operating power";

In claim 7, line 3, "the maximum received power", line 5, "the minimum received power", line 7, "the ratio", line 8, "the lowest power ratio", line 9, "the transmit power", line 10, "the minimum received power";

In claim 8, line 2, "the base station", lines 2-3, "the minimum power"; line 4, "the lowest ratio";

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In claim 9, line 1, “the level of interference”, line 3, “the maximum received power”, line 5, “the minimum received power”, line 9, “the lowest power ratio”, line 10, “the power level”, lines 10-11, “the minimum received power”;

In claim 10, line 1, “the communication quality”, line 3, “the maximum received power”, “each active network user”, line 4, “the minimum received power”, line 5, “the frame error rate”, line 6, “the maximum received power to minimum received power ratio”, line 8, “the transmitting power”, lines 8-9, “the transmit power”, line 9, “the lowest power ratio”, line 10, “the new power level”;

In claim 11, lines 3-4, “the weakest network user”;

In claim 12, line 1, “the operating power”, lines 1-2, “each user”, line 2, “the lowest maximum to minimum received power ratio”;

In claim 13, 3-4, “the weakest network user”;

In claim 14, line 8, “the maximum received power”, line 9, “the smallest ratio”, line 11, “the transmit power”, lines 11-12, “the minimum received signal”;

In claim 15, line 6, “the minimum transmit power”; line 8, “the maximum received power”, line 10, “the weakest link”, lines 12 and 14, “the powers”, line 14, “the optimal”, line 15, “the number”, “the resulting new interference”;

In claim 16, line 3, “the scaling factor”.

Furthermore, in claim 16, all of the symbols in the scaling factor should be defined as what they are and what their ranges are in between.

6. Claims 8, 12 and 13 are further rejected under as being incomplete for omitting essential elements.

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To be more specific, in claim 8, although a CDMA cellular communications network with an active mobile user and a base station are recited, there are no essential elements within the network for interacting between the mobile user and base station and essential elements for carrying out the claimed function of "determining the minimum power and lowest ratio" and the function of "multiplying the minimum power with the lowest ratio", etc..

In claims 12 and 13, although a wireless digital communications network with network users are recited, there are no essential elements within the network for interacting between the users and essential elements for carrying out the claimed function of "determining the minimum received power and lowest maximum to minimum received power ratio" and the function of "determining the operating power by multiplying the minimum received power by the maximum to minimum received power ratio of the weakest user", etc..

7. Claims 4, 14-16 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

8. Claims 1-3, 6, 7, 9, 10 and 11 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and a terminal disclaimer is timely filed.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Padovani et al. '812 & '044, Almgren et al., Weaver, Jr. et al., Agrawal et al., Ueda and Hamabe are all cited to show the common feature of transmission power level control in cellular communications system similar to the claimed invention.

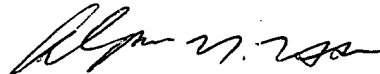
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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (703)305-4377. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D. Vu can be reached on (703)308-6602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHH



Alpus H. Hsu  
Primary Examiner  
Art Unit 2665